

	1	2
	LiCl	Be
Mean BE (NIST)	56.03	111.57
Std. Dev. (NIST)	0.21	0.25
BE Range (NIST)	0.40	0.50
# of NIST Values	3	3
95% Confid Level	0.52	0.63

	NaCl	Mg
Mean BE (NIST)	1071.90	49.64
Std. Dev. (NIST)	0.56	0.21
BE Range (NIST)	1.60	0.65
# of NIST Values	8	11
95% Confid Level	0.47	0.14

BEs of The Elements by XPS

Mean BEs from NIST SRD-20 Database v3.4
Standard Deviation for NIST Mean BE
Range (Spread) Between High and Low NIST BEs
Number (#) of BE Values Reported in NIST Database
MS-Excel Based Calculation of Confidence Level (95%)
for NIST Mean BE Value

Because the NIST database did not report BEs for some alkali and alkaline elements, a common salt was substituted.

	13	14	15	16	17	18
	B	C	Si3N4	SiO2	MF	Ne(+)
Mean BE (NIST)	187.28	284.63	397.82	532.88	684.12	962.40
Std. Dev. (NIST)	0.85	0.42	0.48	0.42	1.04	0.75
BE Range (NIST)	2.00	1.52	1.72	2.30	3.50	1.80
# of NIST Values	5	15	35	51	20	4
95% Confid Level	1.06	0.23	0.17	0.12	0.49	1.19

	Al	Si	P	S	KCl	Ar(+)
Mean BE (NIST)	72.90	99.40	130.18	163.91	196.70	241.32
Std. Dev. (NIST)	0.19	0.26	0.32	0.60	2.82	0.63
BE Range (NIST)	0.80	1.30	1.00	1.90	6.50	1.90
# of NIST Values	16	51	10	9	9	11
95% Confid Level	0.10	0.07	0.23	0.46	2.17	0.43

	3	4	5	6	7	8	9	10	11	12								
	KCl	CaCO3	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	KBr	Kr(+)
Mean BE (NIST)	292.67	346.87	398.55	453.86	512.44	574.19	639.67	707.28	778.18	852.73	932.61	1021.70	18.64	29.17	41.71		68.80	207.45
Std. Dev. (NIST)	0.19	0.15	0.34	0.32	0.25	0.27	1.02	0.93	0.25	0.40	0.21	0.35	0.20	0.28	0.20		0.12	0.21
BE Range (NIST)	0.40	0.30	0.50	1.10	0.76	0.90	2.22	4.20	0.70	1.80	0.90	1.30	0.56	1.05	0.50		0.20	0.30
# of NIST Values	4	4	2	8	9	15	10	27	9	25	28	15	8	11	16		4	2
95% Confid Level	0.30	0.24	3.18	0.27	0.19	0.15	0.73	0.37	0.19	0.17	0.08	0.19	0.17	0.19	0.12		0.18	1.91

	RbCl	SrF2	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	Lil	Xe(+)
Mean BE (NIST)	110.00	133.90	155.87	178.91	202.18	227.82		280.84	307.02	335.21	368.20	404.94	443.78	484.95	527.96	573.00	619.30	669.78
Std. Dev. (NIST)	0.14	0.21	0.11	0.31	0.35	0.46		1.90	0.43	0.37	0.10	0.22	0.34	0.51	0.63	0.34	0.57	0.56
BE Range (NIST)	0.20	0.30	0.30	1.01	1.10	2.50		6.00	1.30	1.70	0.50	0.70	1.45	2.42	2.00	1.44	0.80	1.80
# of NIST Values	2	2	7	16	13	22		15	10	28	24	11	18	23	9	20	2	7
95% Confid Level	1.27	1.91	0.10	0.17	0.21	0.21		1.06	0.31	0.14	0.04	0.47	0.17	0.22	0.48	0.16	5.08	0.52

	Cs	BaO	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi
Mean BE (NIST)		780.10	835.90	14.32	21.73	31.35	40.55		60.78	71.10	83.98	99.83	117.61	136.84	156.93
Std. Dev. (NIST)		0.67	0.00	0.06	0.13	0.20	0.29		0.19	0.13	0.16	0.10	0.27	0.30	0.16
BE Range (NIST)		1.42	0.00	0.17	0.30	0.70	0.90		0.70	0.47	0.55	0.20	0.50	1.50	0.52
# of NIST Values		4	2	5	9	13	8		10	31	27	4	3	19	9
95% Confid Level		1.07	0.00	0.08	0.10	0.12	0.25		0.13	0.05	0.06	0.15	0.67	0.15	0.12